

Rpt. 4b

N D.O.

REPORT ON OIL ENGINE MACHINERY.

No. 102182

Received at London Office

NEWCASTLE-ON-TYNE

Date of writing Report

When handed in at Local Office

26. 6. 1944 Port of

No. in Survey held at Reg. Book.

Newcastle on Tyne

Date, First Survey (1943) June 3rd

Last Survey 7th June 1944

Number of Visits 76

Single
Twin
Triple
Quadruple

Screw vessel

SAN VELINO

Tons Gross 8210
Net

Built at Newcastle (Hethorn) By whom built R.W. Hawthorn, Leslie & Co. Ltd. Yard No. 661 When built 1944

Engines made at (St. Peter's) By whom made Little Engine No. 4000 When made 1944

Donkey Boilers made at NEWCASTLE LEEDS By whom made R.W. Hawthorn, Leslie & Co. Ltd. Clayton Sons & Co. Ltd. Boiler No. 4000 When made 1943

Brake Horse Power 3500. Owners Eagle Oil Co. Ltd. Port belonging to London.

Nom. Horse Power as per Rule 502. Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Trade for which vessel is intended Ocean going - Carrying Petroleum in bulk.

L ENGINES, &c. Type of Engines Hawthorn-Workshop Supercharged 2 or 4 stroke cycle 4. Single or double acting Single

Maximum pressure in cylinders 700 lb./sq. in. Diameter of cylinders 650 mm. Length of stroke 1400 mm. No. of cylinders 8 No. of cranks 8.

Mean Indicated Pressure 135 lb./sq. in. Is there a bearing between each crank Yes

Revolutions per minute 120 Flywheel dia. 2260 mm. Weight 6000 Kg. Means of ignition Heat & Compression Kind of fuel used Heavy oil.

Crank Shaft, dia. of journals as per Rule 448. Crank pin dia. 460. Crank Webs Mid. length breadth shrunk Thickness parallel to axis 267 & 290.

Intermediate Shafts, diameter as per Rule 325. Thrust Shaft, diameter at collars as per Rule 448.

Intermediate Shafts, diameter as fitted 470 mm. at bearings 375 mm. bet " 460.

Intermediate Shafts, diameter as fitted 460. Is the shaft fitted with a continuous liner Yes

Intermediate Shafts, diameter as fitted 400. Is the shaft fitted with a continuous liner Yes

Intermediate Shafts, diameter as fitted 18.55 mm. Thickness between bushes as fitted 15. Is the after end of the liner made watertight in the

Intermediate Shafts, diameter as fitted 20. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner In one length.

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AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule *yes* ✓

Can the internal surfaces of the receivers be examined and cleaned *yes* ✓ Is a drain fitted at the lowest part of each receiver *yes* ✓

High Pressure Air Receivers, No. *nil* ✓ Cubic capacity of each *✓* Internal diameter *✓* thickness *✓*

Seamless, lap welded or riveted longitudinal joint *✓* Material *✓* Range of tensile strength *✓* Working pressure *by Rules* ✓

Starting Air Receivers, No. *2* ✓ Total cubic capacity *600 cub. ft.* ✓ Internal diameter *5' 3"* ✓ thickness *7/8"* ✓

Seamless, lap welded or riveted longitudinal joint *T.R. Duffell* ✓ Material *M. Stl.* ✓ Range of tensile strength *28-32 tons* ✓ Working pressure *by Rules* *355 lbs.* ✓

IS A DONKEY BOILER FITTED? *yes* ✓ If so, is a report now forwarded? *yes* ✓

Is the donkey boiler intended to be used for domestic purposes only *No* ✓

PLANS. Are approved plans forwarded herewith for Shafting *7-11-43 + 12-2-43* ✓ Receivers *29-5-43* ✓ Separate Fuel Tanks *✓*

Donkey Boilers *✓* General Pumping Arrangements *✓* Pumping Arrangements in Machinery Space *12-2-43*

Oil Fuel Burning Arrangements *12-2-43*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes* ✓

State the principal additional spare gear supplied *As per attached list.*

The foregoing is a correct description,

R.B. Flewson

Manufacturer.

Dates of Survey while building { During progress of work in shops-- (1943) June 3, 21, Aug. 10, 19, 24, 25, 27, 30, 31, Sept. 7, 8, 10, 14, 15, 17, 23, Oct. 4, 4, 8, 11, 14, 15, 18, 19, 21, 21, 22, 22, 26, 29, Nov. 4, 8, 9, 10, 13, 17, 19, 24, 25, Dec. 2, 6, 8, 14, 17, 22 (1944) Jan. 6, 9, 24, 25, 27, 29, Feb. 3, 10, 15, 17, 24, Mar. 11, 28, Apr. 28, May 5, 12, 15, 16, 19, 23, 24, 25, 26, 30, June 3, 6, 7.
Total No. of visits *76*

Dates of Examination of principal parts—Cylinders *26-10-43* ✓ Covers *27-8-43* ✓ Pistons *14-10-43* ✓ Rods *17-11-43* ✓

Crank shaft *14-10-43* ✓ Flywheel shaft *24-11-43* ✓ Thrust shaft *14-10-43* ✓ Intermediate shafts *14-10-43* ✓ Tube shaft *✓*

Screw shaft *14-10-43* ✓ Propeller *22-10-43* ✓ Stern tube *22-10-43* ✓ Engine seatings *✓* Engines holding down bolts *15-2-44* ✓

Completion of fitting sea connections *8-11-43* ✓ Completion of pumping arrangements *23-5-44* ✓ Engines tried under working conditions *24-5-44* ✓

Crank shaft, Material *J. Stl.* ✓ Identification Mark *12936 HAI.* ✓ Flywheel shaft, Material *J. Stl.* ✓ Identification Mark *12512 HAI.* ✓

Thrust shaft, Material *J. Stl.* ✓ Identification Mark *12512 HAI.* ✓ Intermediate shafts, Material *J. Stl.* ✓ Identification Marks *12512 HAI.* ✓

Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *J. Stl.* ✓ Identification Mark *12512 HAI.* ✓

Is the flash point of the oil to be used over 150° F. *yes* ✓

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with *yes* ✓

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *✓*

If so, have the requirements of the Rules been complied with *✓*

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with *not desired*

Is this machinery duplicate of a previous case *yes* ✓ If so, state name of vessel *NATICINA*

General Remarks (State quality of workmanship, opinions as to class, &c.)

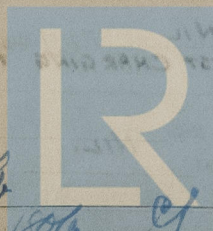
Eng. 3985
Ship 652.

The Machinery of this Vessel has been constructed under special Survey in accordance with the approved plans and the Society's Rules, and the materials and workmanship are good. The machinery has been efficiently fitted on board the Vessel, tried under working conditions with satisfactory results, and is eligible in our opinion for record + LMC. 6.44, and the notations TS. Cl. Oil Eng. machy gft., 1-Water Tube DB-180 lbs. and 1-DB 180 lbs.

The Steam Pipes are of Bessemer Steel as per Advice Notes.

The amount of Entry Fee .. £ 6 : :
Special .. £ 100 : 2 :
2 STARTING AIR RECS .. £ 6 : 6 :
WT Donkey Boiler Fee .. £ 22 : 0 :
Travelling Expenses (if any) £ : : 19 :
When applied for 29 JUN 1944
When received, 19 :
Committee's Minute TUES. 25 JUL 1944
Assigned + LMC 6.44

A. Watt for *S. J. & J. E. Martin*
Engineer Surveyors to Lloyd's Register of Shipping.



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Foundation